Monitoring Data Record

Project Title: R-2248D – Charlotte Outer Loop COE Action ID: 200131321 Stream Name: Trib. to Dixon Branch (Site 19) DWQ Number: 011231 City, County and other Location Information: Mecklenburg County, Charlotte Outer Loop, R-2248D Left of Project Station 10+00 Y-7 Date Construction Completed: May 2008 Monitoring Year: (2) of 5 Ecoregion: 8 digit HUC unit 03050103 USGS Quad Name and Coordinates: Rosgen Classification: Proposed C4 stream type classification Length of Project: 400 ft. Urban or Rural: Urban Watershed Size: Monitoring DATA collected by: M. Green and J. Young Date: 3/16/10
Applicant Information: Name: NCDOT – Roadside Environmental Unit Address: 1425 Rock Quarry Rd, Raleigh, NC 27610
Telephone Number:(919) 861-3772
Telephone Number: Email address: Project Status:
Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level 1 The permittee shall perform the following components of Level I monitoring each year for the 5-year monitoring period or through two documented bankfull flow events: Reference photos; plant survival (i.e. identify specific problem areas (missing, stressed, damaged or dead plantings), estimated causes, and proposed/required remedial action);visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. The permittee shall submit the monitoring reports to the USACE, Raleigh Regulatory Field Office Project Manager, within sixty days after completing the monitoring. If less than two bankfull events occur during the first 5 years, the permittee shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the five-year monitoring period, the USACE, in consultation with the resource agencies, may determine that further monitoring is not required. It is suggested that all bankfull occurrences be monitored and reported through the required monitoring period. The permittee shall perform and submit photo documentation twice each year (summer and winter) for the 5-year monitoring period, and for any subsequently required monitoring period.
Section 1. PHOTO REFERENCE SITES (Monitoring at all levels must complete this section) Total number of reference photo locations at this site: 8 photos were taken from 4 photo point locations
Dates reference photos have been taken at this site: 2/23/09, 9/1/09, 3/16/10 Individual from whom additional photos can be obtained (name, address, phone):

Other Information relative to site photo reference: A site map with photo point locations is attached to
this report.
If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.
Section 2. PLANT SURVIVAL Attach plan sheet indicating reference photos.
Identify specific problem areas (missing, stressed, damaged or dead plantings): Type I & II plantings were minimal.
Estimated causes, and proposed/required remedial action: NCDOT proposes to replant Type I and II plantings after remedial work takes place on the stream.
ADDITIONAL COMMENTS: The planted vegetation that was surviving onsite consisted of black willow. Other vegetation noted onsite consisted lespedeza, briars, jewelweed, alder, cattails, tulip poplar, goldenrod, and various grasses

If required to complete Level 1 and Level 2 monitoring <u>only</u> stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. <u>Physical measurements of channel stability/morphology will not be required.</u> Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

UT to Dixon Branch (Site 19) stream relocation is experiencing some instability for the Year 2 Winter evaluation. The right arm of the first crossvane at the outlet of the pipe (Sta 9+90 Y-7) has been displaced into the center of the channel. Also, downstream of the pipe the right bank has experienced some bank erosion at Sta. 9+80 Y-7. Two areas of bank scouring were noted upstream of the pipe crossing during this evaluation. NCDOT plans to perform remedial work at this stream relocation to repair the unstable areas.

Date Station Station Station Station Station 3/16/10 9+90 Y-7 9+80 Y-7 10+40 Y-7 10+80 Y-7 Number Structure Crossvane Type Is water piping through or around structure? Head cut or down cut present? Bank or scour Bank erosion Bank Bank erosion on right bank scouring on scouring on left bank left bank present? Other Right arm of problems crossvane has noted? been displaced into channel.

UT to Dixon Branch

Site 19



Photo Point #1 (Upstream)



Photo Point #2 (Downstream)



Photo Point #2 (Upstream)



Photo Point #3 (Upstream) Year 2 Winter – March 2010



Photo Point #3 (Downstream)

UT to Dixon Branch

Site 19



Photo Point #4 (Upstream)



Photo of right bank downstream of pipe



Left bank scouring at end of J-Hook @ Sta. 10+40 Y-7 Year 2 Winter – March 2010



Photo Point #4 (Downstream)



Left bank scouring at end of J-Hook @ Sta. 10+80 Y-7

